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## **CLAIMS**

- 1. A method of generating an electric current, said method comprising the steps of:
  - 1. creating a magnetic field extending from a first magnetic pole to a second magnetic pole,
  - 2. creating a first magnetically permeable path extending from adjacent said first magnetic pole to adjacent said second magnetic pole,
  - winding a coil about said first magnetic path,
  - 4. connecting an electrical load across said coil,
  - 5. connecting a switch means in series with said coil,
  - 6. enabling a second magnetically permeable path to move relative to said poles into a position between said first and second magnetic poles to shunt said first magnetic path.
  - 7. moving said second magnetically permeable path relative to said poles out of said position between said first and second magnetic poles, and
  - 8. opening and closing said switch means so that said switch means is closed when said second magnetic path is moving into said position and opened when said second magnetic path is moving out of said position.
- 2. The method as claimed in claim 1 including the step of rotating said second magnetic path.
- 3. The method as claimed in claim 2 wherein the rotation of said second magnetic path is arcuate.
- 4. The method as claimed in claim 3 wherein the rotation of said second magnetic path is circular.
- 5. The method as claimed in any one of claims 2-4 wherein said switch means is mechanical and said method includes the step of operating said switch means in synchronism with said rotation of said second magnetic path.
- 6. The method as claimed in any one of claims 1-5 and including a plurality of coils.
- 7. The method as claimed in claim 6 wherein for each coil a corresponding magnetic field and corresponding second magnetically permeable path are provided.
- 8. The method as claimed in claim 7 wherein the electric current generated is bidirectional.

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- 9. The method as claimed in any one of claims 1-7 wherein the electric current generated is unidirectional.
- 10. The method as claimed in claim 1 wherein said relative movement of said second magnetic path is oscillatory.
- II. A method as claimed in any one of claims 1-4 wherein said switch means is electronic.
- 12. A method as claimed in claim 11 wherein said electronic switch means is selected from the group consisting of SCRs, thyristors, transistors and diodes.
- 13. A method as claimed in any one of claims 1-12 wherein opening said switch means creates a high resistance circuit and closing said switch means creates a low resistance circuit.
- 14. An electrical device comprising a magnetic field means having first and second magnetic poles between which a magnetic field extends, a first magnetically permeable path carrying a coil and extending from adjacent said first magnetic pole to adjacent said second magnetic pole, and switch means connected in series with said coil, a second magnetically permeable path mounted for movement relative to said poles into and out of a position between said first and second magnetic poles in which said second path shunts said first path, and means to close said switch means as said second path moves towards said position and open said switch means as said second path moves out of said position.
- 15. The device as claimed in claim 14 wherein said second path is rotatably mounted.
- The device as claimed in claim 15 wherein said rotation is arcuate.
- The device as claimed in claim 16 wherein said rotation is circular.
- 18. The device as claimed in any one of claims 14-17 wherein said switch means is mechanical and operable in synchronism with said movement of said second magnetic path.
- 19. The device as claimed in any one of claims 14-17 wherein said switch means is electronic.
- 20. The device as claimed in claim 19 wherein said switch means is selected from the group consisting of SCRs, thyristors, transistors and diodes.
- 21. The device as claimed in any one of claims 14-20 wherein said switch means is switched between high resistance and low resistance states.

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- 22. The device as claimed in any one of claims 14-21 and including a plurality of coils.
- 23. The device as claimed in claim 22 and having for each coil a corresponding magnetic field means and a corresponding second magnetically permeable path.
- 24. The device as claimed in claim 23 wherein the electric current generated is bidirectional.
- 25. The device as claimed in any one of claims 14-23 wherein the electric current generated is unidirectional.
- 26. The device as claimed in claim 14 wherein the movement of said second magnetically permeable path is oscillatory.
- 27. The device as claimed in any one of claims 14-26 and comprising an electric generator and having an electrical load connected in series with said coil.
- 28. The device as claimed in any one of claims 14-26 and comprising an electric motor.